

Appln. No.: 10/634,607

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**CENTRAL FAX CENTER**  
**OCT 12 2006****AMENDMENTS TO THE CLAIMS:**

**1. (Previously Presented)** An electrode for an electrochemical cell, comprising:  
an electrode material including an active material having a proton-conducting compound and a nitrogen-containing heterocyclic compound;

wherein the nitrogen-containing heterocyclic compound is one or more compounds selected from the group consisting of imidazole, triazole, pyrazole, and their derivatives.

**2. (Original)** The cell electrode as claimed in Claim 1 wherein the electrode material comprises a nitrogen-containing heterocyclic compound and a polymer having a unit containing a nitrogen-containing heterocyclic moiety.

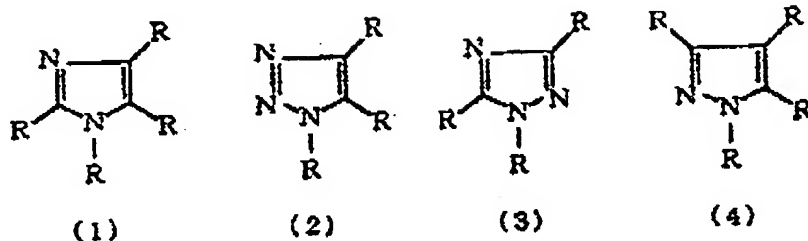
**3. (Original)** The cell electrode as claimed in Claim 1, used for an electrochemical cell wherein only protons act as a charge carrier in a redox reaction in both electrodes associated with charge and discharge.

**4. (Previously Presented)** The cell electrode as claimed in Claim 1, wherein the nitrogen-containing heterocyclic compound further comprises one or both of benzimidazole and its derivatives.

**5. (Previously Presented)** The cell electrode as claimed in Claim 1, wherein the nitrogen-containing heterocyclic compound is one or more compounds selected from the group consisting of imidazole or its derivative represented by formula (1), triazole or its

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derivative represented by formula (2) or (3), and pyrazole or its derivative represented by formula (4):



wherein R independently represent hydrogen, alkyl having 1 to 4 carbon atoms, amino, carboxyl, nitro, phenyl, vinyl, halogen, acyl, cyano, trifluoromethyl, alkylsulfonyl or trifluoromethylthio.

6-7. (Canceled)

8. (Original) The cell electrode as claimed in Claim 1 comprising 1 to 80 parts by weight of the nitrogen-containing heterocyclic compound to 100 parts by weight of the active material.

9. (Canceled)

10. (Original) The cell electrode as claimed in Claim 2 comprising 1 to 80 parts by weight of the nitrogen-containing heterocyclic compound and the polymer to 100 parts by weight of the active material.

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**11. (Original)** An electrochemical cell wherein at least one of the electrodes is the electrode as claimed in Claim 1 and both electrodes comprise a proton-conducting compound as an active material.

**12. (Original)** An electrochemical cell as claimed in Claim 11 comprising an electrolyte containing a proton source wherein only protons act as a charge carrier in a redox reaction in both electrodes associated with charge and discharge.

**13. (Original)** A secondary battery comprising the electrochemical cell as claimed in Claim 11.

**14-16. (Canceled)**

**17. (Previously Presented)** An electrochemical cell wherein at least one of the electrodes is the electrode as claimed in Claim 4 and both electrodes comprise a proton-conducting compound as an active material.

**18. (Previously Presented)** The electrochemical cell as claimed in claim 17 comprising an electrolyte containing a proton source wherein only protons act as a charge carrier in a redox reaction in both electrodes associated with charge and discharge.

**19. (Previously Presented)** A secondary battery comprising an electrochemical cell:

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wherein at least two of the electrodes of the electrochemical cell comprise an electrode material including an active material having a proton-conducting compound;

wherein at least one of the electrodes of the electrochemical cell comprises an electrode material including a nitrogen-containing heterocyclic compound; and

wherein the nitrogen-containing heterocyclic compound comprises one or more compounds selected from the group consisting of imidazole, triazole, pyrazole, and their derivatives.

**20. (Previously Presented)** An electrochemical cell wherein at least one of the electrodes is the electrode as claimed in Claim 5 and both electrodes comprise a proton-conducting compound as an active material.

**21. (Previously Presented)** The electrochemical cell as claimed in Claim 20 comprising an electrolyte containing a proton source wherein only protons act as a charge carrier in a redox reaction in both electrodes associated with charge and discharge.

**22. (Previously Presented)** The electrochemical cell as claimed in Claim 20, wherein the electrochemical cell is arranged in a secondary battery.